REMARKS

Claims 1-54 are pending. Claims 38-54 are withdrawn from consideration, and remaining claims 1-37 stand rejected. Applicants respectfully request reconsideration of the present application in view of the amendments set forth above and the remarks below.

Amendments to the Claims

Applicants amend claims 1 and 26 to positively recite a "vapor deposition formed polymer coating," rather than a polymer coating being formed by vapor deposition upon the fiber web, as required by the Examiner. No new matter is added.

Information Disclosure Statement

The Examiner continues to submit that the Supplemental Information Disclosure Statement (SIDS) filed on June 23, 2003 fails to comply with 37 CFR 1.97(c) because it lacks a statement as specified in 37 CFR 1.97(e). It appears that the statement submitted with the SIDS filed on June 23, 2003 failed to include the word "first." Accordingly, the undersigned hereby certify that each item of information contained in the information disclosure statement was *first* cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. Applicants therefore request consideration of the references cited in the June 23, 2003 SIDS.

Election/Restriction

Applicants continue to request reconsideration of the restriction requirement of the claims to the following groups: (1) claims 1-37 and (2) claims 38-54. In the first Office Action, the Examiner argued that "the electret filter media and respirator recited in claims 1-37 can be made by a process unrelated to vapor deposition, such as spray coating or dipping. Accordingly, the inventions are distinct." (May 23, 2003 Office Action, page 2.) Independent claims 1 and 26 have been amended to positively recite a vapor deposition formed polymer coating. Moreover, as previously argued in an Amendment and Response dated July 3, 2003,

the electret filter media and respirator recited in claims 1-37 can only be made by the vapor deposition process. Accordingly, claims 1-37 are not distinct from claims 38-54, and therefore reconsideration and withdrawal of the restriction requirement is respectfully requested.

Rejection Pursuant to 35 U.S.C. §102(b)/103(a)

Claims 1-15, and 17-37 are rejected pursuant to 35 U.S.C. §102(b) as being anticipated by WO 00/78430 (Cox), and claims 1-15 and 26-37 are also rejected pursuant to 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,645,627 of Lifshutz et al. (Lifshutz). The Examiner argues that Cox and Lifshutz both disclose a filter media substantially as claimed, noting that patentable weight is not given with respect to the recitation that the polymer coating be formed by vapor deposition upon the fiber web. The Examiner also rejects claims 2-5 and 17-25 pursuant to 35 U.S.C. § 103(b) as being obvious over Lifshutz in view of a publication entitled "Barrier Properties of Plasma and Chemically Fluorinated Polypropylene and Polyethylenterephthalate" by Friedrich et al. (Friedrich).

At the outset, the Examiner submits that independent claims 1 and 26 recite a product-by-process, and therefore patentable weight is given to the end product, and not the process by which the product is formed. While Applicants have amended independent claims 1 and 26 to positively recite a "vapor deposition formed polymer coating," and therefore patentable weight should be given to the claimed limitation, Applicants maintain that the end product is not the same as or obvious over the prior art. An electret filter media having a vapor deposition formed coating disposed thereon, e.g., the product, is not the same as, nor is it obvious from the teachings of Lifshutz, Cox, and/or the cited publication.

The filter media taught and claimed in the present invention is both structurally and functionally distinct from the prior art filter media. During vapor phase deposition, as taught by the present invention, a monomer is evaporated into a vacuum chamber and *condenses* onto the surface of a fiber web to *coat* the fibers. The monomer is cured by exposing the treated web to an energy source, which causes the monomer species to polymerize. As a result, a substantially uniform coating is formed on the fiber web. Both Lifshutz and Cox are limited to

a filter media having a charge stabilizing additive present *within* the web. The additive is mixed with the polymer resin to form polymer pellets which are then extruded into fibers to form a fiber web. (Cox, Page 9, lines 16-20.) Neither filter media includes any type of surface coating formed thereon. Likewise, the cited publication is limited to a *plasma* treated filter media. Plasma treatments are conducted in a vacuum, and are used to *modify* the surface of a substrate, such as a polymer fiber web, with a *plasma*. The plasma is formed by placing a chemical gas under vacuum in a chamber containing the substrate. The vacuum pressure ionizes the gas to form free radicals which react with the polymer fiber web to *alter* the surface chemistry of the web. As a result, the filter media disclosed by the cited publication is structurally distinct from the claimed filter media since vapor deposition formed polymer coatings do not alter the surface chemistry.

The filter media claimed by the present invention also exhibits excellent filtration efficiency, and in particular it has a very low alpha decay. Conventional electret filter media tend to lose their charge after filtering certain contaminants for relatively short time periods. The result is a marked decrease in filter performance over a relatively short period of time (e.g., less than 20 minutes). The Applicants have found that an electret filter media having a *vapor deposition formed coating* disposed thereon shows a significant improvement over prior art filter media.

Applicants refer the Examiner to the examples set forth in the specification which illustrate this improvement. As shown on page 15, Applicants compared a vapor phase deposition treated electret filter media (Example 1) to a plasma treated electret filter media (Comparative Example A) and an electret filter media having a charge stabilizing additive present within the web (Comparative Example B). As shown in Table 2, Applicants' filter media (Example 1) had a much higher filtration efficiency, starting at an Alpha value of 21.35, while Comparative Example A had an Alpha value of 6.60 and Comparative Example B had an Alpha value of 18.56. Applicants' filter media also retained its Alpha value throughout DOP load testing, dropping to an Alpha of 17.08 after 230 mg of DOP load. Comparative Example A showed a decrease in Alpha after 230 mg of DOP load to 4.88, and Comparative Example B

showed a significant decrease in Alpha after 230 mg of DOP load to 3.71.

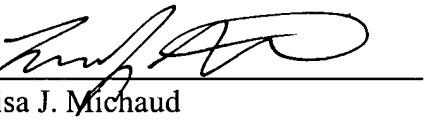
Accordingly, Applicants' vapor deposition treated electret filter media product is not the same as, or obvious over, the filter media taught by Lifshutz, Cox, and the cited publication. Applicants have provided a novel and non-obvious filter media, respirator, and methods for making the same, that is structurally distinct and that offers several advantages over the prior art filters. Accordingly, claims 1-54 distinguish over the cited references and represent allowable subject matter.

Conclusion

In view of the amendments and remarks above, Applicants submit that claims 1-54 are in condition for allowance. Applicants encourage the Examiner to telephone the undersigned upon receipt of this response to discuss any issues that may remain.

Respectfully submitted,

Date: January 15, 2004



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